Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter Activity Filter

Baseline Devl 1GAA

Starts In FY

	VBS No: 1GAA0101 Title: Project Management, Oversight & Control Letivity ID: 1GAA100010 Description: ER Program Management, Oversight & Control Cost Risk 1 Schedule Risk 1											
ACTIVITY ID. 1GA	Description. Lix Floqram Wanagement, V	Version &	COTILIOI					COSI KISK	1 Schedule K	isk i		
Line Item	Description	Quantity	Units	BOE	Labor	Labor Hours	Labor Cost	Materials/ Sub	Contingency	Total Prime	Burden Cost	Total Cost
	-			Type	Hours/Unit	Total	Total	Cost	& Escalation	Cost		
010	ER Program Management	1.00 €	each	EE	689	689	36.827	31.518	0	68.345	17.972	86.317
020	ER Program Control	1.00 €	each	EE	689	689	19.616	43.057	0	62.673	9.573	72.245
030	ER Program Support	1.00 €	each	EE	1.378	1.378	66.185	4.600	0	70.785	32.298	103.084
040	ER Baseline Updates	1.00 €	each	EE	240	240	7.007	0	0	7.007	3.420	10.427
050	ER Hydrogeology Issue Management	1.00 6	each	EE	304	304	8.986	40.999	0	49.985	4.385	54.370
	Tot	al for Activity	v 1GAA1000	10:		3.300	138.622	120.174	0	258.796	67.647	326.443

Line Item 010 - ER Program Management

1GAA0101

1GAA100010

BOE

WBS No:

Activity ID:

One ER Program Manager (M020)is required from June through September accounting months. Estimated hours are calculated as follows: Scheduled working hours remaining (Jun-Sep)729 Hrs - 40 Hrs TOWP = 689 Hrs

One ER Administrative Support person (G010) from July through September accounting months. Estimated hours are calculated as follows: Schedule working hours remaining (Jul-Sep) = 660 Hrs

Pagers: ER has 13 personnel with pagers, 11 with digital/numeric and 2 with alpha. Cost for the pagers is \$2.90/month and \$6.30/month, respectively. Based upon information received from Telecommunications Support, Karen Peisley (x5193).

Trip Costs: Expected to take one trip per year. Each trip is cost is calculated as follows: Airfare - \$1500, rental car (including fuel) - \$45/day x 5 days = \$225, hotel - 5 nights x \$80/night = \$400, per diem - 5 days x \$35/day = \$175
Total per trip cost - \$2,300

Resources

s	Cost Element			Skill			Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	M020	MANAGE	RS (GRADE 69 - 72)	K265S	ER Pro	ograms	Linear	689.00	Hours
Facto	rs 1 Program Manager		689	729 Sched Hrs - 40 Vac Hrs						
A52	TENERA	G010	ADMINIS	TRATIVE ASSISTANTS	K265S	ER Pro	ograms	Linear	29.040.00	Dollars
Facto	rs 1 Admin Support		660	Hrs		44	Dollars/hour		T.	
A5H	SUBCONTRACTED SRVS	0000	NONE		K265S	ER Pro	ograms	Linear	127.60	Dollars
Facto	rs 11 digital pagers	ı	2.9	Dollars/pager/month		4	months		1	
A5F	SUBCONTRACTED SRVS	0000	NONE		K265S	ER Pro	ograms	Linear	50.40	Dollars
Facto	rs 2 alpha pagers		6.3	Dollars/pager/month		4	months			
A5F	SUBCONTRACTED SRVS	0000	NONE		K265S	ER Pro	ograms	Back Loaded	0.00	Dollars
Facto	rs 0 Video tape production		13025	Dollars per production		1			T.	
A5N	TRAVEL/TRAIN/RELOCAT	0000	NONE		K265S	ER Pro	ograms	Bell Shaped	2.300.00	Dollars
Facto	rs 1 Trip		2300	Dollars per trip						

Line Item 020 - ER Program Control

BOE

One ER Program Control Manager (P070)is required from June through September accounting months. Estimated hours are calculated as follows: Scheduled working hours remaining (Jun-Sep)729 Hrs - 40 Hrs TOWP = 689 Hrs

One ER Project Control Support person (P070)is required from June through September accounting months. Estimated hours are calculated as follows: Scheduled working hours remaining (Jun-Sep)729 Hrs - 40 Hrs TOWP = 689 Hrs

It is estimated that 1 computer replacement will be required for a member of the ER Program per year. The system cost was taken from the Computer Support internet site. System specifications and pricing as follows:

Computer: Dell 600 PIII GX110/T, 192MB RAM, 13.6GB Hard Drive, CD-RW - \$1,690

Monitor: Dell P991 (18" Viewable) - \$517

Standard software includes: NT operating system, McAfee Antivirus, MS Office 97 Standard (Word, Excel, PowerPoint), MS Internet Explorer, and MS Exchange

Program Supplies including printer cartridges, binders, printer paper, personal safety equipment, etc. are estimated to cost an average of \$100/person per month. Monthly cost is calculated as follows:16 people x \$100/month = \$1600

Resources

es	Cost Element		Skill	Department	Curve	Quantity Units
	750	STRAIGHT TIME BASE	P070 COST ESTIMATORS PLANNERS AN	K265S ER Programs	Linear	689.00 Hours
	Fastore	1 Program Control Mar	680 720 Sch working Hrs. 40 H	re Vac		

WBS No: 1GAA0101 Baseline Devl Proiect Rocky Flats Closure Project Activity ID: 1GAA100010 WBS Filter 1GAA **Baseline Cost and Basis of Estimate** Activity Filter Starts In FY A5C SUPPLIES 0000 NONE K265S ER Programs 6.400.00 Dollars Linear Factors 16 Project personnel 100 Dollars supplies/month/person Months A5C SUPPLIES 0000 NONE K265S ER Programs Back Loaded 2.207.00 Dollars Computer system 2207 Dollars per system A5H SUBCONTRACTED SRVS P070 COST ESTIMATORS PLANNERS AN R100S RMRS Salaried Linear 34.450.00 Dollars Project Cntrl Support 729 Sch working Hrs - 40 Hrs Vac Factors 50 dollars/hr Line Item 030 - ER Program Support One ER Technical Support Manager (M020) is required from June through September accounting months. Estimated hours are calculated as follows: BOE Scheduled working hours remaining (Jun-Sep)729 Hrs - 40 Hrs TOWP = 689 Hrs One ER Field Operations Manager (M030) is required from June through September accounting months. Estimated hours are calculated as follows: Scheduled working hours remaining (Jun-Sep)729 Hrs - 40 Hrs TOWP = 689 Hrs Trip Costs: Expected to take one trip per year per person. Each trip is cost is calculated as follows: Airfare - \$1500, rental car (including fuel) -\$45/day x 5 days = \$225, hotel - 5 nights x \$80/night = \$400, per diem - 5 days x \$35/day = \$175 Total per trip cost - \$2,300 Resources Cost Element Skill Department Curve Quantity Units 750 STRAIGHT TIME BASE M020 MANAGERS (GRADE 69 - 72) K265S ER Programs 689.00 Hours Linear 1 Technical Support Mar 729 Sch Work Hrs - 40 Hrs Vac Factors 750 STRAIGHT TIME BASE M030 MANAGEMENT INTEGRATORS (GR | K265S | ER Programs Linear 689.00 Hours Field Operations Mar 689 729 Sch Work Hrs - 40 Hrs Vac Factors A5M TRAVEL/TRAIN/RELOCAT 0000 NONE K265S ER Programs Bell Shaped 4.600.00 Dollars Factors 2 Trine 2300 Dollars/trip Line Item 040 - ER Baseline Updates 2 Environmental Engineers will be required for ER baseline update of outyear projects. Estimated hours are calculated as follows: 20 hours per week for 4 BOE weeks per person. 1 Project Control Support person will be required for ER baseline update of outyear projects. Estimated hours are calculated as follows: 20 hours per week for 4 weeks. Resources Cost Element Quantity Units Department Curve 750 STRAIGHT TIME BASE E050 ENVIRONMENTAL ENGINEERS R100S RMRS Salaried Front Loaded 160.00 Hours **Environmental Engineers** hours per month month Factors 750 STRAIGHT TIME BASE COST ESTIMATORS PLANNERS AN R100S RMRS Salaried 80 00 Hours Front Loaded Factors Project Control Support 80 hours per month 1 month Line Item 050 - ER Hydrogeology Issue Management ER Hydrogeology issue management will require an Environmental Scientist (S020) an estimated 24 hours per week and an Environmental Engineer (E050) an BOE estimated 16 hours per week for the June through September accounting months. Estimated hours are calculated as follows: 24 hours per week x 19 weeks (June through September accounting months) = 456 hours 16 hours per week x 19 weeks (June through September accounting months) = 304 hours Department Curve Units Resources Cost Element Skill Quantity E050 ENVIRONMENTAL ENGINEERS R100S RMRS Salaried 750 STRAIGHT TIME BASE Linear 304.00 Hours 16 Hours per week 19 Factors weeks A5H SUBCONTRACTED SRVS S020 ENVIRONMENTAL SCIENTISTS K265S ER Programs Linear 40,998.96 Dollars Factors 24 Hours per week 19 weeks 89.91 per hour Activity ID: 1GAA100020 Description: ER Program Management, Oversight & Control 1 Schedule Risk Cost Risk Total Prime Line Item Description **Ouantity** Unite BOELabor Labor Hours Labor Cost Materials/ Sub | Contingency Burden Cost Total Cost Type Hours/Unit Total Total Cost & Escalation Cost ER Program Management 1.00 each EE 1.898 1.898 101.448 103,131 204,579 48.391 252,970 0 ER Program Control 1.00 each FF 1.898 1.898 54.036 129.157 Λ 183.193 25.775 208.968 EE ER Program Support 1.00 each 3.796 3.796 182.322 4.600 186.922 86.968 0 273.889 ER Baseline Updates 1.00 each EE 360 360 10.511 0 0 10.511 5.014 15.524

1.00 each

EE

832

832

24.594

010

020

030

040

050

ER Hvdrogeology Issue Management

0

136.802

11.731

148.533

Rockv Flats Closure Proiect

Baseline Cost and Basis of Estimate

Proiect

WBS Filter

1GAA

Activity Filter

**

			Daseille Cost and Dasis of Estimate				Activ	rity Filter *		Starts In FY *		
SYS	Contingency And Escalation		1.00 ea	EE	0	0	0	0	47.604	47.604	0	47.604
	•	Total for	Activity 1GAA	100020·		8 784	372 911	349 096	47 604	769 611	177 878	947 489

Line Item 010 - ER Program Management

1GAA0101

1GAA100020

BOE

WBS No:

Activity ID:

One ER Program Manager (M020)is required from October through September accounting months. Estimated hours are calculated as follows: Scheduled working hours per year 2080 Hrs - 120 Hrs TOWP - 62 Hrs holiday = 1898 Hrs

One ER Administrative Support person (G010) from October through September accounting months. Estimated hours are calculated as follows: Scheduled working hours per year 2080 Hrs - 80 Hrs TOWP - 62 Hrs holiday = 1938 Hrs

GIS arc view software upgrades for Nick Demos and Win Chromec. Cost for the every other year upgrade is \$1,000 per user. Based upon a Marian Carr (x4488) email received 4/13/00.

Video production: Based upon actual cost of the Trench 1 video tape production invoices from the Garkie Group, Boulder CO - \$13,025

Pagers: ER has 13 personnel with pagers, 11 with digital/numeric and 2 with alpha. Cost for the pagers is \$2.90/month and \$6.30/month, respectively. Based upon information received from Telecommunications Support, Karen Peisley (x5193).

Trip Costs: Expected to take one trip per year. Each trip is cost is calculated as follows: Airfare - \$1500, rental car (including fuel) - \$45/day x 5 days = \$225, hotel - 5 nights x \$80/night = \$400, per diem - 5 days x \$35/day = \$175
Total per trip cost - \$2,300

Resources

								1	
es	Cost Element			Skill		Department	Curve	Ouantity	Units
750	STRAIGHT TIME BASE	M020	MANAGE	RS (GRADE 69 - 72)	K265S	ER Programs	Linear	1.898.00	Hours
Factors	1 Program Manager		1898	Hrs per vear					
A52	TENERA	G010	ADMINIS'	TRATIVE ASSISTANTS	K265S	ER Programs	Linear	85.272.00	Dollars
Factors	1 Admin Support		1938	Hrs per vear		44 Dollars/hour			
A5C	SUPPLIES	0000	NONE		K265S	ER Programs	Back Loaded	2.000.00	Dollars
Factors	2 GIS Software Upgrades		1000	Dollars / upgrade					
A5H	SUBCONTRACTED SRVS	0000	NONE		K265S	ER Programs	Linear	382.80	Dollars
Factors	11 digital pagers		2.9	Dollars/pager/month		12 months			
A5H	SUBCONTRACTED SRVS	0000	NONE		K265S	ER Programs	Linear	151.20	Dollars
Factors	2 alpha pagers		6.3	Dollars/pager/month		12 months			
A5H	SUBCONTRACTED SRVS	0000	NONE		K265S	ER Programs	Back Loaded	13.025.00	Dollars
Factors	1 Video tape production		13025	Dollars per production					
A5M	TRAVEL/TRAIN/RELOCAT	0000	NONE		K265S	ER Programs	Bell Shaped	2.300.00	Dollars
Factors	1 Trip		2300	Dollars per trip					

Line Item 020 - ER Program Control

BOE

One ER Program Control Manager (P070)is required from October through September accounting months. Estimated hours are calculated as follows: Scheduled working hours per year 2080 Hrs - 120 Hrs TOWP - 62 Hrs holiday = 1898 Hrs

One ER Project Control Support person (P070)is required from October through September accounting months. Estimated hours are calculated as follows: Scheduled working hours per year 2080 Hrs - 120 Hrs TOWP - 62 Hrs holiday = 1898 Hrs

It is estimated that 1 computer replacement will be required for a member of the ER Program per year. The system cost was taken from the Computer Support internet site. Sytem specifications and pricing as follows:

Computer: Dell 600 PIII GX110/T, 192MB RAM, 13.6GB Hard Drive, CD-RW - \$1,690

Monitor: Dell P991 (18" Viewable) - \$517

Standard software includes: NT operating system, McAfee Antivirus, MS Office 97 Standard (Word, Excel, PowerPoint), MS Internet Explorer, and MS Exchange

The ER Program will be required to purchase printers for the program. The printer cost was taken from the Computer Support internet site and is priced as follows:

HP 8000 DN Printer (High Volume) \$6,110

HP Color LaserJet 4500DN (Medium Volume) \$4,440

Program Supplies including printer cartridges, binders, printer paper, personal safety equipment, etc. are estimated to cost an average of \$100/person per month. Monthly cost is calculated as follows:16 people x \$100/month = \$1600

Trip Costs: Expected to take one trip per year. Each trip is cost is calculated as follows: Airfare - \$1500, rental car (including fuel) - \$45/day x 5 days = \$225, hotel - 5 nights x \$80/night = \$400, per diem - 5 days x \$35/day = \$175
Total per trip cost - \$2,300

Page 3 of 17 6/23/00 8:58:04 AM *OFFICIAL USE ONLY*

WBS No: 1GAA0101 Baseline Devl Proiect Rocky Flats Closure Project 1GAA Activity ID: 1GAA100020 WBS Filter **Baseline Cost and Basis of Estimate** <u>Activ</u>ity Filter Starts In FY 1/nits Cost Element Resources Department Curve 1.898.00 Hours 750 STRAIGHT TIME BASE P070 COST ESTIMATORS PLANNERS AN | K265S | ER Programs Linear Factors 1 Program Control Mgr 1898 Hrs per vear A5C SUPPLIES NONE K265S ER Programs 19.200.00 Dollars 0000 Linear 16 Project personnel 100 Dollars supplies/month/person 12 Months Factors A5C SUPPLIES 0000 NONE K265S ER Programs 2.207.00 Dollars Back Loaded Factors 1 Computer system 2207 Dollars per system A5C SUPPLIES 0000 NONE K265S ER Programs Front Loaded 10.550.00 Dollars Factors 10550 Dollars/printers A5H SUBCONTRACTED SRVS COST ESTIMATORS PLANNERS AN R100S RMRS Salaried Linear 94.900.00 Dollars Factors 1 Project Cntrl Support 1898 Hrs per vear 50 dollars/hr K265S ER Programs A5M TRAVEL/TRAIN/RELOCAT 0000 NONE Bell Shaped 2.300.00 Dollars Factors 1 Trip 2300 Dollars per trip Line Item 030 - ER Program Support One ER Technical Support Manager (M020) is required from October through September accounting months. Estimated hours are calculated as follows: BOE Scheduled working hours per year 2080 Hrs - 120 Hrs TOWP - 62 Hrs holiday = 1898 Hrs One ER Field Operations Manager (M030) is required from October through September accounting months. Estimated hours are calculated as follows: Scheduled working hours per year 2080 Hrs - 120 Hrs TOWP - 62 Hrs holiday = 1898 Hrs Trip Costs: Expected to take one trip per year per person. Each trip is cost is calculated as follows: Airfare - \$1500, rental car (including fuel) -\$45/day x 5 days = \$225, hotel - 5 nights x \$80/night = \$400, per diem - 5 days x \$35/day = \$175 Total per trip cost - \$2,300 Cost Element Units Resources Skill Department Curve Quantity 750 STRAIGHT TIME BASE M020 MANAGERS (GRADE 69 - 72) K265S ER Programs Linear 1.898.00 Hours Technical Support Mar 1898 Hrs per vear Factors 1 MANAGEMENT INTEGRATORS (GR | K265S | ER Programs 750 STRAIGHT TIME BASE 1.898.00 Hours M030 Linear Factors 1 Field Operations Mar 1898 Hrs per vear A5M TRAVEL/TRAIN/RELOCAT 0000 NONE K265S ER Programs 4 600 00 Dollars **Bell Shaped** Factors 2 Trips 2300 Dollars/trip Line Item 040 - ER Baseline Updates 2 Environmental Engineers will be required for ER baseline update of outvear projects. Estimated hours are calculated as follows: 10 hours per week per BOE 1 Project Control Support person will be required for ER baseline update of outyear projects. Estimated hours are calculated as follows: 10 hours per week. Resources Cost Element Skill Department Units Curve 750 STRAIGHT TIME BASE E050 ENVIRONMENTAL ENGINEERS 240.00 Hours R100S RMRS Salaried Back Loaded **Envrionmental Engineers** hours per week 12 weeks Factors 2 750 STRAIGHT TIME BASE P070 COST ESTIMATORS PLANNERS AN R100S RMRS Salaried **Back Loaded** 120.00 Hours Factors Project Control Support hours per week 12 weeks Line Item 050 - ER Hydrogeology Issue Management ER Hydrogeology issue management will require an Environmental Scientist (S020) an estimated 24 hours per week and an Environmental Engineer (E050) an BOE estimated 16 hours per week. Estimated hours are calculated as follows: 24 hours per week x 52 weeks = 1248 hours 16 hours per week x 52 weeks = 832 hours **Ouantity** Units Resources Cost Element Skill Department Curve R100S RMRS Salaried 750 STRAIGHT TIME BASE **ENVIRONMENTAL ENGINEERS** Linear 832.00 Hours Factors 16 Hours per week weeks K265S ER Programs A5H SUBCONTRACTED SRVS S020 ENVIRONMENTAL SCIENTISTS 112.207.70 Dollars Linear Factors 24 Hours per week weeks 89 91 per hour Line Item SYS - Contingency And Escalation

BOE

Page 4 of 17 6/23/00 8:58:04 AM *OFFICIAL USE ONLY*

WBS No: 1GAA0101 Rocky Flats Closure Project Activity ID: 1GAA100020 **Baseline Cost and Basis of Estimate**

Baseline Devl Project WBS Filter Activity Filter

1GAA

Resources

		Activity Filter *							
es		Cost Element		Skill		Department	Curve	<i>Ouantity</i>	Units
	CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	28.681.51	Dollars
-	Factors	28681.5 Dollars							
	ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	18.922.57	Dollars

Factors 18922.6 Dollars

Activity ID: 1GAA100030 Description: ER Program Management, Oversight & Control Cost Risk 1 Schedule Risk BOELabor Cost Materials/ Sub Total Prime Line Item Description **Quantity** Units Labor Labor Hours Contingency Burden Cost Total Cost TypeHours/Unit **Total Total** Cost & Escalation Cost 010 ER Program Management 1.00 each FF 1.898 1.898 101.448 101.131 202.579 35.811 238.390 n EE 020 ER Program Control 1.00 each 1.898 1.898 54.036 123.607 0 177.643 19.075 196.718 030 ER Program Support 1.00 each EE 3.796 3.796 182.322 4.600 0 186,922 64.360 251.282 ER Baseline Updates FF 040 1.00 each 360 360 0 10.511 3.710 14.221 10.511 n 050 ER Hydrogeology Issue Management 1.00 each EE 832 832 24.594 112.208 0 136.802 8.682 145.483 SYS Contingency And Escalation 1.00 ea FF 0 126.134 126.134 Λ 126.134 Λ Λ Λ 372.911 Total for Activity 1GAA100030: 8.784 341.546 126.134 840.591 131.638 972.228

Line Item 010 - ER Program Management

BOE

One ER Program Manager (M020)is required from October through September accounting months. Estimated hours are calculated as follows: Scheduled working hours per year 2080 Hrs - 120 Hrs TOWP - 62 Hrs holiday = 1898 Hrs

One ER Administrative Support person (G010) from October through September accounting months. Estimated hours are calculated as follows: Scheduled working hours per year 2080 Hrs - 80 Hrs TOWP - 62 Hrs holiday = 1938 Hrs

Video production: Based upon actual cost of the Trench 1 video tape production invoices from the Garkie Group, Boulder CO - \$13,025

Pagers: ER has 13 personnel with pagers, 11 with digital/numeric and 2 with alpha. Cost for the pagers is \$2.90/month and \$6.30/month, respectively. Based upon information received from Telecommunications Support, Karen Peisley (x5193).

Trip Costs: Expected to take one trip per year. Each trip is cost is calculated as follows: Airfare - \$1500, rental car (including fuel) - \$45/day x 5 days = \$225, hotel - 5 nights x \$80/night = \$400, per diem - 5 days x \$35/day = \$175 Total per trip cost - \$2,300

Resources

es	Cost Element			Skill		Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	M020	MANAGE	RS (GRADE 69 - 72)	K265S	ER Programs	Linear	1,898.00	Hours
Factors	1 Program Manager	•	1898	Hrs per vear					
A52	TENERA	G010	ADMINIS	TRATIVE ASSISTANTS	K265S	ER Programs	Linear	85.272.00	Dollars
Factors	1 Admin Support		1938	Hrs per vear		44 Dollars/hour			
A5H	SUBCONTRACTED SRVS	0000	NONE		K265S	ER Programs	Linear	382.80	Dollars
Factors	11 digital pagers		2.9	Dollars/pager/month		12 months			
A5H	SUBCONTRACTED SRVS	0000	NONE		K265S	ER Programs	Linear	151.20	Dollars
Factors	2 alpha pagers		6.3	Dollars/pager/month		12 months			
A5H	SUBCONTRACTED SRVS	0000	NONE		K265S	ER Programs	Back Loaded	13.025.00	Dollars
Factors	1 Video tape production		13025	Dollars per production					
A5M	TRAVEL/TRAIN/RELOCAT	0000	NONE		K265S	ER Programs	Bell Shaped	2.300.00	Dollars
Factors	1 Trip		2300	Dollars per trip					

Line Item 020 - ER Program Control

BOE

One ER Program Control Manager (P070)is required from October through September accounting months. Estimated hours are calculated as follows: Scheduled working hours per year 2080 Hrs - 120 Hrs TOWP - 62 Hrs holiday = 1898 Hrs

One ER Project Control Support person (P070)is required from October through September accounting months. Estimated hours are calculated as follows: Scheduled working hours per year 2080 Hrs - 120 Hrs TOWP - 62 Hrs holiday = 1898 Hrs

It is estimated that 1 computer replacement will be required for a member of the ER Program per year. The system cost was taken from the Computer Support internet site. Sytem specifications and pricing as follows:

Computer: Dell 600 PIII GX110/T, 192MB RAM, 13.6GB Hard Drive, CD-RW - \$1,690

Monitor: Dell P991 (18" Viewable) - \$517

Standard software includes: NT operating system, McAfee Antivirus, MS Office 97 Standard (Word, Excel, PowerPoint), MS Internet Explorer, and MS Exchange

Page 5 of 17 6/23/00 8:58:04 AM OFFICIAL USE ONLY *WBS No:* 1GAA0101 *Activity ID:* 1GAA100030

Rockv Flats Closure Project Baseline Cost and Basis of Estimate

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WBS Filter
Activity Filter

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Baseline Devl

Starts In FY

Program Supplies including printer cartridges, binders, printer paper, personal safety equipment, etc. are estimated to cost an average of \$100/person per month. Monthly cost is calculated as follows:16 people x \$100/month = \$1600

Estimated tuition expense: \$2500/semester

Trip Costs: Expected to take one trip per year. Each trip is cost is calculated as follows: Airfare - \$1500, rental car (including fuel) - \$45/day x 5 days = \$225, hotel - 5 nights x \$80/night = \$400, per diem - 5 days x \$35/day = \$175
Total per trip cost - \$2,300

Resources

es	Cost Element			Skill		Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	P070 C0	OST EST	IMATORS PLANNERS AN	K265S	ER Programs	Linear	1.898.00	Hours
Factor	s 1 Program Control Mgr		1898	Hrs per vear					
A5C	SUPPLIES	0000 N	IONE		K265S	ER Programs	Linear	19.200.00	Dollars
Factor	s 16 Proiect personnel		100	Dollars supplies/month/pers	on	12 Months			
A5C	SUPPLIES	0000 N	IONE		K265S	ER Programs	Back Loaded	2.207.00	Dollars
Factor	s 1 Computer system		2207	Dollars per system					
A5H	SUBCONTRACTED SRVS	P070 C	COST EST	IMATORS PLANNERS AN	R100S	RMRS Salaried	Linear	94.900.00	Dollars
Factor	s 1 Proiect Cntrl Support		1898	Hrs per vear		50 dollars/hr			
A5M	TRAVEL/TRAIN/RELOCAT	0000 N	IONE		K265S	ER Programs	Linear	5.000.00	Dollars
Factor	s 2500 Dollars/semester		2	Semesters/vear					
A5M	TRAVEL/TRAIN/RELOCAT	0000 N	IONE		K265S	ER Programs	Bell Shaped	2.300.00	Dollars
Factor	s 1 Trip		2300	Dollars per trip					

Line Item 030 - ER Program Support

BOE

One ER Technical Support Manager (M020) is required from October through September accounting months. Estimated hours are calculated as follows: Scheduled working hours per year 2080 Hrs - 120 Hrs TOWP - 62 Hrs holiday = 1898 Hrs

One ER Field Operations Manager (M030) is required from October through September accounting months. Estimated hours are calculated as follows: Scheduled working hours per year 2080 Hrs - 120 Hrs TOWP - 62 Hrs holiday = 1898 Hrs

Trip Costs: Expected to take one trip per year per person. Each trip is cost is calculated as follows: Airfare - \$1500, rental car (including fuel) - \$45/day x 5 days = \$225, hotel - 5 nights x \$80/night = \$400, per diem - 5 days x \$35/day = \$175
Total per trip cost - \$2,300

Resources

s		Cost Element	Skill			Department	Curve	Quantity Uni
	750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	K265S	ER Programs	Linear	1.898.00 Hours
	Factors	1 Technical Support Mgr		1898 Hrs per year				
	750	STRAIGHT TIME BASE	M030	MANAGEMENT INTEGRATORS (G	R K265S	ER Programs	Linear	1,898.00 Hours
	Factors	1 Field Operations Mgr		1898 Hrs per year				
	A5M	TRAVEL/TRAIN/RELOCAT	0000	NONE	K265S	ER Programs	Bell Shaped	4,600.00 Dollar
	Factors	2 Trips		2300 Dollars/trip				

Line Item 040 - ER Baseline Updates

BOE

2 Environmental Engineers will be required for ER baseline update of outyear projects. Estimated hours are calculated as follows: 10 hours per week per person.

1 Project Control Support person will be required for ER baseline update of outyear projects. Estimated hours are calculated as follows: 10 hours per week.

Resources

es		C	Cost Element			Skill			Department	Curve	Quantity	Units	
	750	STRAIGH	T TIME BASE	E050	ENVIRO	NMENTAL ENGINEERS	R100S	RMRS	Salaried	Max Backload	240.00	Hours	
	Factors	2	Envrionmental Engineers		10	hours per week		12	weeks				
	750	STRAIGH	T TIME BASE	P070	COST E	STIMATORS PLANNERS AN	R100S	RMRS	Salaried	Max Backload	120.00	Hours	
	Factors	1	Project Control Support		10	hours per week		12	weeks				

Line Item 050 - ER Hydrogeology Issue Management

BOE

ER Hydrogeology issue management will require an Environmental Scientist (S020) an estimated 24 hours per week and an Environmental Engineer (E050) an estimated 16 hours per week.

Estimated hours are calculated as follows: 24 hours per week x 52 weeks = 1248 hours 16 hours per week x 52 weeks = 832 hours

Page 6 of 17 6/23/00 8:58:04 AM *OFFICIAL USE ONLY*

WBS No: 1GAA0101 Rockv Flats Closure Project
Activity ID: 1GAA100030 Baseline Cost and Basis of Estimate

Proiect Baseline Devl WBS Filter 1GAA Activity Filter *

Resources ____

SL			Cost Element		Skill		Department	Curve	Ouantity Units
	750	STRAIGH	IT TIME BASE	E050	ENVIRONMENTAL ENGINEERS	R100S	RMRS Salaried	Linear	832.00 Hours
-	Factors	16	Hours per week		52 weeks				
	A5H	SUBCON	TRACTED SRVS	S020	ENVIRONMENTAL SCIENTISTS	K265S	ER Programs	Linear	112.207.70 Dollars
	Factors	24	Hours per week		52 weeks		89.91 per hour		

Line Item SYS - Contingency And Escalation

BOE

Resources

es	Cost Element	Skill	Department	Curve	Ouantity Units
CO	N CONTINGENCY	0000 NONE	ZDEPT No Department	Linear	86.595.07 Dollars
Facto	rs 86595.1 Dollars				
ES	ESCALATION	0000 NONE	ZDEPT No Department	Linear	39.539.19 Dollars

Factors 39539.2 Dollars

Activity ID: 1GAA100040 Description: ER Program Management, Oversight & Control

Cost Risk 1 Schedule Risk

1

Starts In FY

ACTIVITY ID. IGA	Description. ER Flogram Management, v	Jversigni a	Control	COST KISK I SCHEUME KISK I								
Line Item	Description	Quantity	Units	BOE	Labor	Labor Hours	Labor Cost	Materials/ Sub	Contingency	Total Prime	Burden Cost	Total Cost
				Type	Hours/Unit	Total	Total	Cost	& Escalation	Cost		
010 ER Program Management			each	EE	1.898	1.898	101.448	103.131	0	204.579	35.101	239.680
020 ER Program Control			each	EE	1.898	1.898	54.036	123.607	0	177.643	18.696	196.340
030	ER Program Support	1.00	each	EE	3.796	3.796	182.322	4.600	0	186.922	63.083	250.005
040	ER Baseline Updates	1.00	each	EE	360	360	10.511	0	0	10.511	3.637	14.148
050	ER Hydrogeology Issue Management	1.00	each	EE	832	832	24.594	112.208	0	136.802	8.509	145.311
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	233.821	233.821	0	233.821
То			ty 1GAA100	040:		8.784	372.911	343.546	233.821	950.277	129.027	1.079.305

Line Item 010 - ER Program Management

BOE

One ER Program Manager (M020)is required from October through September accounting months. Estimated hours are calculated as follows: Scheduled working hours per year 2080 Hrs - 120 Hrs TOWP - 62 Hrs holiday = 1898 Hrs

One ER Administrative Support person (G010) from October through September accounting months. Estimated hours are calculated as follows: Scheduled working hours per year 2080 Hrs - 80 Hrs TOWP - 62 Hrs holiday = 1938 Hrs

GIS arc view software upgrades for Nick Demos and Win Chromec. Cost for the every other year upgrade is \$1,000 per user. Based upon a Marian Carr (x4488) email received 4/13/00.

Video production: Based upon actual cost of the Trench 1 video tape production invoices from the Garkie Group, Boulder CO - \$13,025

Pagers: ER has 13 personnel with pagers, 11 with digital/numeric and 2 with alpha. Cost for the pagers is \$2.90/month and \$6.30/month, respectively. Based upon information received from Telecommunications Support, Karen Peisley (x5193).

Trip Costs: Expected to take one trip per year. Each trip is cost is calculated as follows: Airfare - \$1500, rental car (including fuel) - \$45/day x 5 days = \$225, hotel - 5 nights x \$80/night = \$400, per diem - 5 days x \$35/day = \$175
Total per trip cost - \$2,300

Resources

ces		Cost Element		Skill		Department	Curve	Quantity	Units
	750 S	TRAIGHT TIME BASE	M020 MANAGE	RS (GRADE 69 - 72)	K265S	ER Programs	Linear	1.898.00	Hours
	Factors	1 Program Manager	1898	Hrs per vear					
L	A52 TI	ENERA	G010 ADMINIS	RATIVE ASSISTANTS	K265S	ER Programs	Linear	85.272.00	Dollars
r	Factors	1 Admin Support	1938	Hrs per vear		44 Dollars/hour			
	A5C SI	UPPLIES	0000 NONE		K265S	ER Programs	Back Loaded	2.000.00	Dollars
	Factors	 GIS Software Upgrades 	1000	Dollars / upgrade	1			, ,	
L	A5H SI	UBCONTRACTED SRVS	0000 NONE		K265S	ER Programs	Linear	382.80	Dollars
	Factors	11 digital pagers	2.9	Dollars/pager/month	1	12 months		, ,	
	A5H SI	UBCONTRACTED SRVS	0000 NONE		K265S	ER Programs	Linear	151.20	Dollars
r	Factors	2 alpha pagers	6.3	Dollars/pager/month	1	12 months		, ,	
	A5H SI	UBCONTRACTED SRVS	0000 NONE		K265S	ER Programs	Back Loaded	13.025.00	Dollars
	Factors	 Video tape production 	13025	Dollars per production	1			, ,	
L	A5M TI	RAVEL/TRAIN/RELOCAT	0000 NONE		K265S	ER Programs	Bell Shaped	2.300.00	Dollars
	Factors	1 Trip	2300	Dollars per trip					

WBS No: 1GAA0101 Activity ID: 1GAA100040

Rockv Flats Closure Project Baseline Cost and Basis of Estimate

Proiect Ba
WBS Filter 1G
Activity Filter *

Baseline Devl 1GAA

Starts In FY *

Line Item 020 - ER Program Control

BOE

One ER Program Control Manager (P070)is required from October through September accounting months. Estimated hours are calculated as follows: Scheduled working hours per year 2080 Hrs - 120 Hrs TOWP - 62 Hrs holiday = 1898 Hrs

One ER Project Control Support person (P070)is required from October through September accounting months. Estimated hours are calculated as follows: Scheduled working hours per year 2080 Hrs - 120 Hrs TOWP - 62 Hrs holiday = 1898 Hrs

It is estimated that 1 computer replacement will be required for a member of the ER Program per year. The system cost was taken from the Computer Support internet site. Sytem specifications and pricing as follows:

Computer: Dell 600 PIII GX110/T, 192MB RAM, 13.6GB Hard Drive, CD-RW - \$1,690

Monitor: Dell P991 (18" Viewable) - \$517

Standard software includes: NT operating system, McAfee Antivirus, MS Office 97 Standard (Word, Excel, PowerPoint), MS Internet Explorer, and MS Exchange

Program Supplies including printer cartridges, binders, printer paper, personal safety equipment, etc. are estimated to cost an average of \$100/person per month. Monthly cost is calculated as follows:16 people x \$100/month = \$1600

Estimated tuition expense: \$2500/semester

Trip Costs: Expected to take one trip per year. Each trip is cost is calculated as follows: Airfare - \$1500, rental car (including fuel) - \$45/day x 5 days = \$225, hotel - 5 nights x \$80/night = \$400, per diem - 5 days x \$35/day = \$175
Total per trip cost - \$2,300

Resources

es		Cost Element			Skill		Department	Curve	Quantity	Units
	750	STRAIGHT TIME BASE	P070	COST ES	TIMATORS PLANNERS AN	K265S	ER Programs	Linear	1.898.00	Hours
	Factors	1 Program Control Mgr		1898	Hrs per vear					
	A5C	SUPPLIES	0000	NONE		K265S	ER Programs	Linear	19,200.00	Dollars
	Factors	16 Project personnel		100	Dollars supplies/month/pers	on	12 Months			
	A5C	SUPPLIES	0000	NONE		K265S	ER Programs	Back Loaded	2,207.00	Dollars
	Factors	1 Computer system		2207	Dollars per system					
	A5H	SUBCONTRACTED SRVS	P070	COST ES	TIMATORS PLANNERS AN	R100S	RMRS Salaried	Linear	94,900.00	Dollars
	Factors	1 Project Cntrl Support		1898	Hrs per year		50 dollars/hr			
	A5M	TRAVEL/TRAIN/RELOCAT	0000	NONE		K265S	ER Programs	Linear	5,000.00	Dollars
	Factors	2500 Dollars/semester		2	Semesters/year					
	A5M	TRAVEL/TRAIN/RELOCAT	0000	NONE		K265S	ER Programs	Bell Shaped	2,300.00	Dollars
	Factors	1 Trip		2300	Dollars per trip					

Line Item 030 - ER Program Support

BOE

One ER Technical Support Manager (M020) is required from October through September accounting months. Estimated hours are calculated as follows: Scheduled working hours per year 2080 Hrs - 120 Hrs TOWP - 62 Hrs holiday = 1898 Hrs

One ER Field Operations Manager (M030) is required from October through September accounting months. Estimated hours are calculated as follows: Scheduled working hours per year 2080 Hrs - 120 Hrs TOWP - 62 Hrs holiday = 1898 Hrs

Trip Costs: Expected to take one trip per year per person. Each trip is cost is calculated as follows: Airfare - \$1500, rental car (including fuel) - \$45/day x 5 days = \$225, hotel - 5 nights x \$80/night = \$400, per diem - 5 days x \$35/day = \$175
Total per trip cost - \$2,300

Resources

es		Cost Element	Skill		Department	Curve	Quantity	Units
	750	STRAIGHT TIME BASE	M020 MANAGERS (GRAD	E 69 - 72) K265S	ER Programs	Linear	1.898.00	Hours
_	Factors	1 Technical Support Mar	1898 Hrs per v	ear				
	750	STRAIGHT TIME BASE	M030 MANAGEMENT INT	EGRATORS (GR K265S	ER Programs	Linear	1.898.00	Hours
_	Factors	1 Field Operations Mar	1898 Hrs per v	ear				
	A5M	TRAVEL/TRAIN/RELOCAT	0000 NONE	K265S	ER Programs	Bell Shaped	4.600.00	Dollars
	Factors	2 Trips	2300 Dollars/tr	ip .				

Line Item 040 - ER Baseline Updates

BOE

2 Environmental Engineers will be required for ER baseline update of outyear projects. Estimated hours are calculated as follows: 10 hours per week per person.

l Project Control Support person will be required for ER baseline update of outyear projects. Estimated hours are calculated as follows: 10 hours per week.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units

WBS No: 1GAA0101 Baseline Devl Proiect Rocky Flats Closure Project Activity ID: 1GAA100040 WBS Filter 1GAA **Baseline Cost and Basis of Estimate** Activity Filter Starts In FY 750 STRAIGHT TIME BASE E050 ENVIRONMENTAL ENGINEERS R100S RMRS Salaried 240.00 Hours Max Backload Envrionmental Engineers 10 hours per week COST ESTIMATORS PLANNERS AN R100S RMRS Salaried 120.00 Hours 750 STRAIGHT TIME BASE P070 Max Backload Factors Project Control Support 10 hours per week 12 weeks Line Item 050 - ER Hydrogeology Issue Management ER Hydrogeology issue management will require an Environmental Scientist (S020) an estimated 24 hours per week and an Environmental Engineer (E050) an BOE estimated 16 hours per week. Estimated hours are calculated as follows: 24 hours per week x 52 weeks = 1248 hours 16 hours per week x 52 weeks = 832 hours Resources Cost Element Skill Curve Units 750 STRAIGHT TIME BASE E050 R100S RMRS Salaried ENVIRONMENTAL ENGINEERS Linear 832.00 Hours Factors 16 Hours per week weeks S020 ENVIRONMENTAL SCIENTISTS K265S ER Programs A5H SUBCONTRACTED SRVS 112.207.70 Dollars Linear Factors 24 Hours per week 89.91 per hour 52 weeks Line Item SYS - Contingency And Escalation BOE Cost Element Resources Skill Department Curve Quantity Unite CON CONTINGENCY 0000 NONE ZDEPT No Department Linear 168,984,90 Dollars Factors 168985 Dollars ESC ESCALATION 0000 NONE ZDEPT No Department 64.836.13 Dollars Linear Factors 64836 1 Dollars Activity ID: 1GAA100050 Description: ER Program Management, Oversight & Control Cost Risk 1 Schedule Risk ROE Materials/ Sub Contingency Total Prime Description Units Labor Labor Hours Labor Cost Burden Cost Total Cost Line Item Quantity & Escalation Type Hours/Unit **Total Total** Cost Cost 010 ER Program Management 1.00 each EE 1.898 1.898 101.448 101.131 0 202.579 28.608 231.187 ER Program Control 1.00 each EE 1.898 1.898 54.036 123.607 0 177.643 15.238 192.881 020 030 ER Program Support 1.00 each EE 3.796 3.796 182.322 4.600 0 186.922 51.415 238.337 ER Baseline Updates FF 5.255 0 5.255 1.482 040 1.00 each 180 180 0 6.737 FF 6.935 050 ER Hydrogeology Issue Management 1.00 each 832 832 24.594 112.208 0 136.802 143.737 SYS Contingency And Escalation 1.00 ea FF 0 0 Λ 0 115.847 115.847 0 115.847 Total for Activity 1GAA100050: 8.604 367.655 341.546 103.679 928.727 115.847 825.048 Line Item 010 - ER Program Management One ER Program Manager (M020) is required from October through September accounting months. Estimated hours are calculated as follows: BOE Scheduled working hours per year 2080 Hrs - 120 Hrs TOWP - 62 Hrs holiday = 1898 Hrs One ER Administrative Support person (G010) from October through September accounting months. Estimated hours are calculated as follows: Scheduled working hours per year 2080 Hrs - 80 Hrs TOWP - 62 Hrs holiday = 1938 Hrs Video production: Based upon actual cost of the Trench 1 video tape production invoices from the Garkie Group, Boulder CO - \$13,025 Pagers: ER has 13 personnel with pagers, 12 with digital/numeric and 2 with alpha. Cost for the pagers is \$2.90/month and \$6.30/month, respectively. Based upon information received from Telecommunications Support, Karen Peisley (x5193). Trip Costs: Expected to take one trip per year. Each trip is cost is calculated as follows: Airfare - \$1500, rental car (including fuel) - \$45/day x 5 days = \$225, hotel - 5 nights x \$80/night = \$400, per diem - 5 days x \$35/day = \$175

Skill

M020 MANAGERS (GRADE 69 - 72)

1898 Hrs per vear

G010 ADMINISTRATIVE ASSISTANTS

1938 Hrs per vear

Total per trip cost - \$2,300

750 STRAIGHT TIME BASE

Factors 1

Factors 1

A52 TENERA

Cost Element

Program Manager

Admin Support

Resources

Page 9 of 17 6/23/00 8:58:06 AM *OFFICIAL USE ONLY*

Curve

Linear

Linear

Department

Dollars/hour

K265S ER Programs

K265S ER Programs

Units

Ouantity

1.898.00 Hours

85.272.00 Dollars

WBS No: 1GAA0101 *Activity ID:* 1GAA100050

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter Baseline Devl

		Baseline Cost a	ind Basis of Estimate	Activity Filter *	Starts In FY *
A5H SUBCONTRACTED SRVS	0000 NONE		K265S ER Programs	Linear	382.80 Dollars
Factors 11 digital pagers	2.9	Dollars/pager/month	12 months		
A5H SUBCONTRACTED SRVS	0000 NONE		K265S ER Programs	Linear	151.20 Dollars
Factors 2 alpha pagers	6.3	Dollars/pager/month	12 months		
A5H SUBCONTRACTED SRVS	0000 NONE		K265S ER Programs	Back Loaded	13.025.00 Dollars
Factors 1 Video tape production	13025	Dollars per production			
A5M TRAVEL/TRAIN/RELOCAT	0000 NONE		K265S ER Programs	Bell Shaped	2.300.00 Dollars
Factors 1 Trip	2300	Dollars per trip			

Line Item 020 - ER Program Control

BOE

One ER Program Control Manager (P070)is required from October through September accounting months. Estimated hours are calculated as follows: Scheduled working hours per year 2080 Hrs - 120 Hrs TOWP - 62 Hrs holiday = 1898 Hrs

One ER Project Control Support person (P070)is required from October through September accounting months. Estimated hours are calculated as follows: Scheduled working hours per year 2080 Hrs - 120 Hrs TOWP - 62 Hrs holiday = 1898 Hrs

It is estimated that 1 computer replacement will be required for a member of the ER Program per year. The system cost was taken from the Computer Support internet site. Sytem specifications and pricing as follows:

Computer: Dell 600 PIII GX110/T, 192MB RAM, 13.6GB Hard Drive, CD-RW - \$1,690

Monitor: Dell P991 (18" Viewable) - \$517

Standard software includes: NT operating system, McAfee Antivirus, MS Office 97 Standard (Word, Excel, PowerPoint), MS Internet Explorer, and MS Exchange

Program Supplies including printer cartridges, binders, printer paper, personal safety equipment, etc. are estimated to cost an average of \$100/person per month. Monthly cost is calculated as follows:16 people x \$100/month = \$1600

Estimated tuition expense: \$2500/semester

Trip Costs: Expected to take one trip per year. Each trip is cost is calculated as follows: Airfare - \$1500, rental car (including fuel) - \$45/day x 5 days = \$225, hotel - 5 nights x \$80/night = \$400, per diem - 5 days x \$35/day = \$175
Total per trip cost - \$2,300

Resources

S Cost Element	Skill Departs	ment Curve Quantity Units
750 STRAIGHT TIME BASE	P070 COST ESTIMATORS PLANNERS AN K265S ER Programs	Linear 1,898.00 Hours
Factors 1 Program Control Mgr	1898 Hrs per year	
A5C SUPPLIES	0000 NONE K265S ER Programs	Linear 19,200.00 Dollars
Factors 16 Project personnel	100 Dollars supplies/month/person 12 Months	
A5C SUPPLIES	0000 NONE K265S ER Programs	Back Loaded 2.207.00 Dollars
Factors 1 Computer system	2207 Dollars per system	
A5H SUBCONTRACTED SRVS	P070 COST ESTIMATORS PLANNERS AN R100S RMRS Salaried	Linear 94.900.00 Dollars
Factors 1 Project Cntrl Support	1898 Hrs per vear 50 dollars/h	ır
A5M TRAVEL/TRAIN/RELOCAT	0000 NONE K265S ER Programs	Linear 5.000.00 Dollars
Factors 2500 Dollars/semester	2 Semesters/vear	
A5M TRAVEL/TRAIN/RELOCAT	0000 NONE K265S ER Programs	Bell Shaped 2.300.00 Dollars
Factors 1 Trip	2300 Dollars per trip	

Line Item 030 - ER Program Support

BOE

One ER Technical Support Manager (M020) is required from October through September accounting months. Estimated hours are calculated as follows: Scheduled working hours per year 2080 Hrs - 120 Hrs TOWP - 62 Hrs holiday = 1898 Hrs

One ER Field Operations Manager (M030) is required from October through September accounting months. Estimated hours are calculated as follows: Scheduled working hours per year 2080 Hrs - 120 Hrs TOWP - 62 Hrs holiday = 1898 Hrs

Trip Costs: Expected to take one trip per year per person. Each trip is cost is calculated as follows: Airfare - \$1500, rental car (including fuel) - \$45/day x 5 days = \$225, hotel - 5 nights x \$80/night = \$400, per diem - 5 days x \$35/day = \$175

Total per trip cost - \$2,300

Resources

es		(Cost Element			Skill		Department	Curve	Quantity	Units
	750	STRAIGH	T TIME BASE	M020	MANAGE	RS (GRADE 69 - 72)	K265S	ER Programs	Linear	1.898.00	Hours
	Factors	1	Technical Support Mar		1898	Hrs per vear					
	750	STRAIGH	T TIME BASE	M030	MANAGE	MENT INTEGRATORS (C	R K265S	ER Programs	Linear	1.898.00	Hours
	Factors	1	Field Operations Mgr		1898	Hrs per vear					

WBS No: 1GAA0101 Baseline Devl Proiect **Rocky Flats Closure Project** Activity ID: 1GAA100050 WBS Filter 1GAA **Baseline Cost and Basis of Estimate** Activity Filter Starts In FY 4.600.00 Dollars A5M TRAVEL/TRAIN/RELOCAT 0000 NONE K265S ER Programs Bell Shaped Factors 2 2300 Dollars/trip Line Item 040 - ER Baseline Updates 2 Environmental Engineers will be required for ER baseline update of outyear projects. Estimated hours are calculated as follows: 10 hours per week per BOE 1 Project Control Support person will be required for ER baseline update of outyear projects. Estimated hours are calculated as follows: 10 hours per week. Resources Cost Element Curve 750 STRAIGHT TIME BASE E050 ENVIRONMENTAL ENGINEERS R100S RMRS Salaried Max Backload 120.00 Hours 2 **Envrionmental Engineers** 10 hours per weeks weeks COST ESTIMATORS PLANNERS AN 750 STRAIGHT TIME BASE P070 R100S RMRS Salaried Max Backload 60.00 Hours Factors Project Control Support hours per weeks weeks Line Item 050 - ER Hydrogeology Issue Management ER Hydrogeology issue management will require an Environmental Scientist (S020) an estimated 24 hours per week and an Environmental Engineer (E050) an BOE estimated 16 hours per week. Estimated hours are calculated as follows: 24 hours per week x 52 weeks = 1248 hours 16 hours per week x 52 weeks = 832 hours Resources Cost Element Skill Curve Quantity Units Denartment 750 STRAIGHT TIME BASE R100S RMRS Salaried 832.00 Hours E050 ENVIRONMENTAL ENGINEERS Linear 16 Hours per week weeks K265S ER Programs A5H SUBCONTRACTED SRVS ENVIRONMENTAL SCIENTISTS Linear 112,207,70 Dollars Factors 24 Hours per week 52 weeks 89.91 per hour Line Item SYS - Contingency And Escalation BOE

Resources

ces		Cost Element		Skill		Department	Curve	Quantity	Units
	CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	37.797.44	Dollars
	Factors	37797.4 Dollars							
	ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	78.049.70	Dollars

Factors 78049.7 Dollars

Activity ID: 1GA	AA100060 Description: ER Program Management,	Oversight &	Control					Cost Risk	1 Schedule F	Risk 1		
Line Item	Description	Quantity	Units	BOE	Labor	Labor Hours	Labor Cost	Materials/ Sub	Contingency	Total Prime	Burden Cost	Total Cost
				Type	Hours/Unit	Total	Total	Cost	& Escalation	Cost		
010	ER Program Management	1.00	each	EE	1.898	1.898	101.448	103.131	0	204.579	35.304	239.883
020	ER Program Control	1.00	each	EE	1.898	1.898	54.036	123.607	0	177.643	18.805	196.448
030	ER Program Support	1.00	each	EE	3.796	3.796	182.322	4.600	0	186.922	63.448	250.370
040	ER Baseline Updates	1.00	each	EE	90	90	2.628	0	0	2.628	914	3.542
050	ER Hydrogeology Issue Management	1.00	each	EE	832	832	24.594	112.208	0	136.802	8.559	145.360
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	445.868	445.868	0	445.868
				060.		8 514	365 028	343 546	445 868	1 154 442	127 030	1 281 471

Line Item 010 - ER Program Management

BOE

One ER Program Manager (M020)is required from October through September accounting months. Estimated hours are calculated as follows: Scheduled working hours per year 2080 Hrs - 120 Hrs TOWP - 62 Hrs holiday = 1898 Hrs

One ER Administrative Support person (G010) from October through September accounting months. Estimated hours are calculated as follows: Scheduled working hours per year 2080 Hrs - 80 Hrs TOWP - 62 Hrs holiday = 1938 Hrs

GIS arc view software upgrades for Nick Demos and Win Chromec. Cost for the every other year upgrade is \$1,000 per user. Based upon a Marian Carr (x4488) email received 4/13/00.

Video production: Based upon actual cost of the Trench 1 video tape production invoices from the Garkie Group, Boulder CO - \$13,025

Pagers: ER has 13 personnel with pagers, 11 with digital/numeric and 2 with alpha. Cost for the pagers is \$2.90/month and \$6.30/month, respectively. Based upon information received from Telecommunications Support, Karen Peisley (x5193).

WBS No: 1GAA0101 *Activity ID:* 1GAA100060

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect
WBS Filter
Activity Filter

Baseline Devl 1GAA

Starts In FY *

Trip Costs: Expected to take one trip per year. Each trip is cost is calculated as follows: Airfare - \$1500, rental car (including fuel) - \$45/day x 5 days = \$225, hotel - 5 nights x \$80/night = \$400, per diem - 5 days x \$35/day = \$175
Total per trip cost - \$2,300

Resources

es	Cost Element		Skill		Department	Curve	Ouantity Units
_ 7	50 STRAIGHT TIME BASE	M020 MANAGE	RS (GRADE 69 - 72)	K265S	ER Programs	Linear	1.898.00 Hours
Fac	tors 1 Program Manager	1898	Hrs per vear	T			
Α	52 TENERA	G010 ADMINIS	TRATIVE ASSISTANTS	K265S	ER Programs	Linear	85.272.00 Dollars
Fac	tors 1 Admin Support	1938	Hrs per vear	Ī	44 Dollars/hour		
Α	5C SUPPLIES	0000 NONE		K265S	ER Programs	Back Loaded	2.000.00 Dollars
Fac	tors 2 GIS Software Upgrades	1000	Dollars / upgrade		1	T	
Α	5H SUBCONTRACTED SRVS	0000 NONE		K265S	ER Programs	Linear	382.80 Dollars
Fac	tors 11 digital pagers	2.9	Dollars/pager/month	1	12 months		
Α	5H SUBCONTRACTED SRVS	0000 NONE		K265S	ER Programs	Linear	151.20 Dollars
Fac	tors 2 alpha pagers	6.3	Dollars/pager/month	1	12 months		
Α	5H SUBCONTRACTED SRVS	0000 NONE		K265S	ER Programs	Back Loaded	13.025.00 Dollars
Fac	tors 1 Video tape production	13025	Dollars per production	1			
A:	M TRAVEL/TRAIN/RELOCAT	0000 NONE		K265S	ER Programs	Bell Shaped	2.300.00 Dollars
Fac	tors 1 Trip	2300	Dollars per trip				

Line Item 020 - ER Program Control

BOE

One ER Program Control Manager (P070)is required from October through September accounting months. Estimated hours are calculated as follows: Scheduled working hours per year 2080 Hrs - 120 Hrs TOWP - 62 Hrs holiday = 1898 Hrs

One ER Project Control Support person (P070)is required from October through September accounting months. Estimated hours are calculated as follows: Scheduled working hours per year 2080 Hrs - 120 Hrs TOWP - 62 Hrs holiday = 1898 Hrs

It is estimated that 1 computer replacement will be required for a member of the ER Program per year. The system cost was taken from the Computer Support internet site. Sytem specifications and pricing as follows:

Computer: Dell 600 PIII GX110/T, 192MB RAM, 13.6GB Hard Drive, CD-RW - \$1,690

Monitor: Dell P991 (18" Viewable) - \$517

Standard software includes: NT operating system, McAfee Antivirus, MS Office 97 Standard (Word, Excel, PowerPoint), MS Internet Explorer, and MS Exchange

Program Supplies including printer cartridges, binders, printer paper, personal safety equipment, etc. are estimated to cost an average of \$100/person per month. Monthly cost is calculated as follows:16 people x \$100/month = \$1600

Estimated tuition expense: \$2500/semester

Trip Costs: Expected to take one trip per year. Each trip is cost is calculated as follows: Airfare - \$1500, rental car (including fuel) - \$45/day x 5 days = \$225, hotel - 5 nights x \$80/night = \$400, per diem - 5 days x \$35/day = \$175
Total per trip cost - \$2,300

Resources

es	Cost Element		Skill		Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	P070 CO	OST ESTIMATORS PLANNERS AN	K265S	ER Programs	Linear	1.898.00	Hours
Factors	1 Program Control Mgr	1	898 Hrs per year					
A5C	SUPPLIES	0000 NO	DNE	K265S	ER Programs	Linear	19.200.00	Dollars
Factors	16 Proiect personnel	1	00 Dollars supplies/month/pers	on	12 Months			
A5C	SUPPLIES	0000 NO	DNE	K265S	ER Programs	Back Loaded	2.207.00	Dollars
Factors	1 Computer system	2:	2207 Dollars per system					
A5H	SUBCONTRACTED SRVS	P070 CO	OST ESTIMATORS PLANNERS AN	R100S	RMRS Salaried	Linear	94.900.00	Dollars
Factors	1 Proiect Cntrl Support	1;	898 Hrs per vear		50 dollars/hr			
A5M	TRAVEL/TRAIN/RELOCAT	0000 NO	DNE	K265S	ER Programs	Linear	5.000.00	Dollars
Factors	2500 Dollars/semester	2	Semesters/vear					
A5M	TRAVEL/TRAIN/RELOCAT	0000 NO	DNE	K265S	ER Programs	Bell Shaped	2.300.00	Dollars
Factors	1 Trip	2	2300 Dollars per trip					

Line Item 030 - ER Program Support

BOE

One ER Technical Support Manager (M020) is required from October through September accounting months. Estimated hours are calculated as follows: Scheduled working hours per year 2080 Hrs - 120 Hrs TOWP - 62 Hrs holiday = 1898 Hrs

Page 12 of 17 6/23/00 8:58:06 AM *OFFICIAL USE ONLY*

WBS No: 1GAA0101 Activity ID: 1GAA100060

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect WBS Filter Baseline Devl 1GAA

Starts In FY

One ER Field Operations Manager (M030) is required from October through September accounting months. Estimated hours are calculated as follows: Scheduled working hours per year 2080 Hrs - 120 Hrs TOWP - 62 Hrs holiday = 1898 Hrs

Trip Costs: Expected to take one trip per year per person. Each trip is cost is calculated as follows: Airfare - \$1500, rental car (including fuel) -\$45/day x 5 days = \$225, hotel - 5 nights x \$80/night = \$400, per diem - 5 days x \$35/day = \$175 Total per trip cost - \$2,300

Resources

es		Cost Element			Skill		Department	Curve	Quantity	Units
	750	STRAIGHT TIME BASE	M020	MANAGE	RS (GRADE 69 - 72)	K265S	ER Programs	Linear	1.898.00	Hours
	Factors	1 Technical Support Mar		1898	Hrs per vear					
	750	STRAIGHT TIME BASE	M030	MANAGE	MENT INTEGRATORS (GR	K265S	ER Programs	Linear	1.898.00	Hours
	Factors	1 Field Operations Mar		1898	Hrs per vear					
	A5M	TRAVEL/TRAIN/RELOCAT	0000	NONE		K265S	ER Programs	Bell Shaped	4.600.00	Dollars
	_									

Factors 2 Trips 2300 Dollars/trip

Line Item 040 - ER Baseline Updates

BOE

2 Environmental Engineers will be required for ER baseline update of outyear projects. Estimated hours are calculated as follows: 10 hours per week per

Project Control Support person will be required for ER baseline update of outyear projects. Estimated hours are calculated as follows: 10 hours per week.

Resources

es L			Cost Element			Skill			Department	Curve	Ouantity	Units
Į	750	STRAIGH	IT TIME BASE	E050	ENVIRO	NMENTAL ENGINEERS	R100S	RMRS	Salaried	Max Backload	60.00 H	lours
_	Factors	2	Envrionmental Engineers		. 10	hours per week		3	weeks			
	750	STRAIGH	IT TIME BASE	P070	COST E	STIMATORS PLANNERS AN	R100S	RMRS	Salaried	Max Backload	30.00 H	lours
	Factors	1	Project Control Support		10	hours per week		3	weeks			

Line Item 050 - ER Hydrogeology Issue Management

BOE

ER Hydrogeology issue management will require an Environmental Scientist (S020) an estimated 24 hours per week and an Environmental Engineer (E050) an estimated 16 hours per week.

Estimated hours are calculated as follows: 24 hours per week x 52 weeks = 1248 hours 16 hours per week x 52 weeks = 832 hours

Resources

es			Cost Element			Skill		Department	Curve	Quantity	Units
	750 S	STRAIGH	IT TIME BASE	E050	ENVIRON	MENTAL ENGINEERS	R100S	RMRS Salaried	Linear	832.00	Hours
	Factors	16	Hours per week		52	weeks					
	A5H S	SUBCON	ITRACTED SRVS	S020	ENVIRON	MENTAL SCIENTISTS	K265S	ER Programs	Linear	112,207.70	Dollars
	Factors	24	Hours per week		52	weeks		89 91 per hour			

Line Item SYS - Contingency And Escalation

BOE

Resources

ces		Cost Element		Skill		Department	Curve	<i>Ouantity</i>	Units
	CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	316.420.70	Dollars
	Factors	316421 Dollars							
	FSC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	129 447 80	Dollare

Factors 129448 Dollars

Activity ID:	1GAA100070	Description:	End of ER Program	Managment	Oversight & Contro

Activity ID: 1GA	A100070 Description: End of ER Program Managn	ment, Oversight & Control						Cost Risk 1 Schedule Risk 1				
Line Item	Description	Quantity	Units	BOE	Labor	Labor Hours	Labor Cost	Materials/ Sub	Contingency	Total Prime	Burden Cost	Total Cost
				Type	Hours/Unit	Total	Total	Cost	& Escalation	Cost		
010	ER Program Management	1.00	each	EE	428	428	22.877	18.966	0	41.842	28.404	70.246
020	ER Program Control	1.00	each	EE	428	428	12.185	26.200	0	38.385	15.129	53.514
030	ER Program Support	1.00	each	EE	856	856	41.114	0	0	41.114	51.047	92.161
050	ER Hydrogeology Issue Management	1.00	each	EE	160	160	4.730	21.578	0	26.308	5.872	32.180
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	99.426	99.426	0	99.426
	То			070:		1.872	80.905	66.744	99.426	247.074	100.452	347.527

WBS No: 1GAA0101 Activity ID: 1GAA100070

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

Proiect Baseline Devl WBS Filter 1GAA Activity Filter *

Starts In FY

Line Item 010 - ER Program Management

BOE

One ER Program Manager (M020)is required from October through December accounting months. Estimated hours are calculated as follows: Scheduled working hours (Oct - Dec) ~ 428 Hours

One ER Administrative Support person (G010) from October through December accounting months. Estimated hours are calculated as follows: Scheduled working hours (Oct - Dec) ~ 428 Hours

Pagers: ER has 13 personnel with pagers, 12 with digital/numeric and 2 with alpha. Cost for the pagers is \$2.90/month and \$6.30/month, respectively. Based upon information received from Telecommunications Support, Karen Peisley (x5193).

Resources

es		Cost Element			Skill			Department	Curve	Quantity	Units
L	750	STRAIGHT TIME BASE	M020	MANAC	SERS (GRADE 69 - 72)	K265S	ER Pro	ograms	Linear	428.00	Hours
	Factors	1 Program Manager		428	Hours						
	A52	TENERA	G010	ADMIN	STRATIVE ASSISTANTS	K265S	ER Pro	ograms	Linear	18.832.00	Dollars
	Factors	1 Admin Support		428	Hours		44	Dollars/hour			
	A5H	SUBCONTRACTED SRVS	0000	NONE		K265S	ER Pro	ograms	Linear	95.70	Dollars
-	Factors	11 digital pagers		2.9	Dollars/pager/month		3	months			
	A5H	SUBCONTRACTED SRVS	0000	NONE		K265S	ER Pro	ograms	Linear	37.80	Dollars
	Factors	2 alpha pagers		6.3	Dollars/pager/month		3	months			

Line Item 020 - ER Program Control

BOE

One ER Program Control Manager (P070)is required from October through December accounting months. Estimated hours are calculated as follows: Scheduled working hours (Oct - Dec)~ 428 Hrs

One ER Project Control Support person (P070) is required from October through December accounting months. Estimated hours are calculated as follows: Scheduled working hours (Oct - Dec)~ 428 Hrs

Program Supplies including printer cartridges, binders, printer paper, personal safety equipment, etc. are estimated to cost an average of \$100/person per month. Monthly cost is calculated as follows:16 people x \$100/month = \$1600

Resources

s	Cost Element	Skill	Department	Curve	Ouantity Units
	750 STRAIGHT TIME BASE	P070 COST ESTIMATORS PLANNERS AN	K265S ER Programs	Linear	428.00 Hours
	Factors 1 Program Control Mgr	428 Hours			
	A5C SUPPLIES	0000 NONE	K265S ER Programs	Linear	4.800.00 Dollars
	Factors 16 Project personnel	100 Dollars supplies/month/persor	n 3 Months		
	A5H SUBCONTRACTED SRVS	P070 COST ESTIMATORS PLANNERS AN	R100S RMRS Salaried	Linear	21,400.00 Dollars
	Factors 1 Project Cntrl Support	428 Hours	50 dollars/hr		

Line Item 030 - ER Program Support

BOE

One ER Technical Support Manager (M020) is required from October through December accounting months. Estimated hours are calculated as follows: Scheduled working hours (Oct - Dec)~ 428 Hrs

One ER Field Operations Manager (M030) is required from October through December accounting months. Estimated hours are calculated as follows: Scheduled working hours (Oct - Dec)~ 428 Hrs

Resources

es			Cost Element			Skill		Department	Curve	Ouantity	Units
	750	STRAIGH	IT TIME BASE	M020	MANAGE	RS (GRADE 69 - 72)	K265S	ER Programs	Linear	428.00	Hours
	Factors	1	Technical Support Mar		428	Hours					
	750	STRAIGH	IT TIME BASE	M030	MANAGE	MENT INTEGRATORS (GR	K265S	ER Programs	Linear	428.00	Hours
	Factors	1	Field Operations Mgr		428	Hours					

Line Item 050 - ER Hydrogeology Issue Management

BOE

ER Hydrogeology issue management will require an Environmental Scientist (S020) an estimated 24 hours per week and an Environmental Engineer (E050) an estimated 16 hours per week.

Estimated hours are calculated as follows: 24 hours per week x 10 weeks = 240 hours 16 hours per week x 10 weeks = 160 hours

Resource

rces			Cost Element			Skill		Department	Curve	<i>Ouantity</i>	Units
	750	STRAIGH	IT TIME BASE	E050	ENVIRO	NMENTAL ENGINEERS	R100S	RMRS Salaried	inear	160.00	Hours
	Factors	16	Hours per week		10	weeks					

WBS No: 1GAA0101 Rockv Flats Closure Project
Activity ID: 1GAA100070 Baseline Cost and Basis of Estimate

10

weeks

Proiect Base WBS Filter 1GA

Baseline Devl 1GAA

Activity Filter * Starts In FY *

A5H SUBCONTRACTED SRVS S020 ENVIRONMENTAL SCIENTISTS K265S ER Programs Linear 21.578.40 Dollars

per hour

89.91

Factors 24 Hours per week
Line Item SYS - Contingency And Escalation

BOE

Resources

ces		Cost Element	Skill	Department	Curve	Ouantity	Units
	CON	CONTINGENCY	0000 NONE	ZDEPT No Department	Linear	52.963.87	Dollars
	Factors	52963.9 Dollars					
	ESC	ESCALATION	0000 NONE	ZDEPT No Department	Linear	46.461.63	Dollars

Factors 46461.6 Dollars

Activity ID: 1GX	Description: ER Program Management, C	Oversight &	Control fy0	6				Cost Risk	1 Schedule R	?isk 1		
Line Item	Description	Quantity	Units	BOE	Labor	Labor Hours	Labor Cost	Materials/ Sub	Contingency	Total Prime	Burden Cost	Total Cost
				Type	Hours/Unit	Total	Total	Cost	& Escalation	Cost		
010	ER Program Management	0.96	each	EE	1.898	1.831	97.889	99.512	0	197.401	34.065	231.466
020	ER Program Control	0.96	each	EE	1.898	1.831	52.140	119.270	0	171.410	18.145	189.555
030	ER Program Support	0.96	each	EE	3.796	3.663	175.925	4.439	0	180.363	61.222	241.585
040	ER Baseline Updates	0.96	each	EE	90	87	2.536	0	0	2.536	882	3.418
050	ER Hydrogeology Issue Management	0.96	each	EE	832	803	23.731	108.271	0	132.002	8.258	140.260
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	682.584	682.584	0	682.584
	Tot	al for Activ	ity 1GXXX1	006:		8.215	352.220	331.491	682.584	1.366.296	122.572	1.488.868

Line Item 010 - ER Program Management

BOE

One ER Program Manager (M020)is required from October through September accounting months. Estimated hours are calculated as follows: Scheduled working hours per year 2080 Hrs - 120 Hrs TOWP - 62 Hrs holiday = 1898 Hrs

One ER Administrative Support person (G010) from October through September accounting months. Estimated hours are calculated as follows: Scheduled working hours per year 2080 Hrs - 80 Hrs TOWP - 62 Hrs holiday = 1938 Hrs

GIS arc view software upgrades for Nick Demos and Win Chromec. Cost for the every other year upgrade is \$1,000 per user. Based upon a Marian Carr (x4488) email received 4/13/00.

Video production: Based upon actual cost of the Trench 1 video tape production invoices from the Garkie Group, Boulder CO - \$13,025

Pagers: ER has 13 personnel with pagers, 11 with digital/numeric and 2 with alpha. Cost for the pagers is \$2.90/month and \$6.30/month, respectively. Based upon information received from Telecommunications Support, Karen Peisley (x5193).

Trip Costs: Expected to take one trip per year. Each trip is cost is calculated as follows: Airfare - \$1500, rental car (including fuel) - \$45/day x 5 days = \$225, hotel - 5 nights x \$80/night = \$400, per diem - 5 days x \$35/day = \$175
Total per trip cost - \$2,300

Resources

BOE

es	Cost Element		Skill		Department	Curve	Ouantity	Units
750	STRAIGHT TIME BASE	M020 MANAG	ERS (GRADE 69 - 72)	K265S	ER Programs	Linear	1,898.00	
Factor.	s 1 Program Manager	1898	Hrs per year					
A52	TENERA	G010 ADMINI	STRATIVE ASSISTANTS	K265S	ER Programs	Linear	85,272.00	Dollars
Factor.	1 Admin Support	1938	Hrs per vear		44 Dollars/hour			
A5C	SUPPLIES	0000 NONE		K265S	ER Programs	Back Loaded	2.000.00	Dollars
Factor.	2 GIS Software Upgrades	1000	Dollars / upgrade					
A5H	SUBCONTRACTED SRVS	0000 NONE		K265S	ER Programs	Linear	382.80	Dollars
Factor.	s 11 digital pagers	2.9	Dollars/pager/month		12 months			
A5H	SUBCONTRACTED SRVS	0000 NONE		K265S	ER Programs	Linear	151.20	Dollars
Factor.	s 2 alpha pagers	6.3	Dollars/pager/month		12 months			
A5H	SUBCONTRACTED SRVS	0000 NONE		K265S	ER Programs	Back Loaded	13.025.00	Dollars
Factor.	y 1 Video tape production	13025	Dollars per production					
A5M	TRAVEL/TRAIN/RELOCAT	0000 NONE		K265S	ER Programs	Bell Shaped	2.300.00	Dollars
Factor.	s 1 Trip	2300	Dollars per trip					

Line Item 020 - ER Program Control

One ER Program Control Manager (P070)is required from October through September accounting months. Estimated hours are calculated as follows: Scheduled working hours per year 2080 Hrs - 120 Hrs TOWP - 62 Hrs holiday = 1898 Hrs

Rocky Flats Closure Project Baseline Cost and Basis of Estimate

WBS Filter Activity Filter

Proiect

1GAA

Baseline Devl

Starts In FY *

One ER Project Control Support person (P070)is required from October through September accounting months. Estimated hours are calculated as follows: Scheduled working hours per year 2080 Hrs - 120 Hrs TOWP - 62 Hrs holiday = 1898 Hrs

It is estimated that 1 computer replacement will be required for a member of the ER Program per year. The system cost was taken from the Computer Support internet site. Sytem specifications and pricing as follows:

Computer: Dell 600 PIII GX110/T, 192MB RAM, 13.6GB Hard Drive, CD-RW - \$1,690

Monitor: Dell P991 (18" Viewable) - \$517

Standard software includes: NT operating system, McAfee Antivirus, MS Office 97 Standard (Word, Excel, PowerPoint), MS Internet Explorer, and MS Exchange

Program Supplies including printer cartridges, binders, printer paper, personal safety equipment, etc. are estimated to cost an average of \$100/person per month. Monthly cost is calculated as follows:16 people x \$100/month = \$1600

Estimated tuition expense: \$2500/semester

Trip Costs: Expected to take one trip per year. Each trip is cost is calculated as follows: Airfare - \$1500, rental car (including fuel) - \$45/day x 5 days = \$225, hotel - 5 nights x \$80/night = \$400, per diem - 5 days x \$35/day = \$175 Total per trip cost - \$2,300

Resources

WBS No:

Activity ID:

1GAA0101

1GXXX1006

es	Cost Element	Skill	Department	Curve	Ouantity Units
L	750 STRAIGHT TIME BASE	P070 COST ESTIMATORS PLANNERS AN	K265S ER Programs	Linear	1.898.00 Hours
r	Factors 1 Program Control Mgr	1898 Hrs per vear			
L	A5C SUPPLIES	0000 NONE	K265S ER Programs	Linear	19.200.00 Dollars
ıd	Factors 16 Project personnel	100 Dollars supplies/month/perso	on 12 Months		
L	A5C SUPPLIES	0000 NONE	K265S ER Programs	Back Loaded	2.207.00 Dollars
ıń	Factors 1 Computer system	2207 Dollars per system			
L	A5H SUBCONTRACTED SRVS	P070 COST ESTIMATORS PLANNERS AN	R100S RMRS Salaried	Linear	94.900.00 Dollars
ıń	Factors 1 Project Cntrl Support	1898 Hrs per vear	50 dollars/hr		
L	A5M TRAVEL/TRAIN/RELOCAT	0000 NONE	K265S ER Programs	Linear	5.000.00 Dollars
ıń	Factors 2500 Dollars/semester	2 Semesters/vear			
L	A5M TRAVEL/TRAIN/RELOCAT	0000 NONE	K265S ER Programs	Bell Shaped	2.300.00 Dollars
	Factors 1 Trip	2300 Dollars per trip			

Line Item 030 - ER Program Support

BOE

One ER Technical Support Manager (M020) is required from October through September accounting months. Estimated hours are calculated as follows: Scheduled working hours per year 2080 Hrs - 120 Hrs TOWP - 62 Hrs holiday = 1898 Hrs

One ER Field Operations Manager (M030) is required from October through September accounting months. Estimated hours are calculated as follows: Scheduled working hours per year 2080 Hrs - 120 Hrs TOWP - 62 Hrs holiday = 1898 Hrs

Trip Costs: Expected to take one trip per year per person. Each trip is cost is calculated as follows: Airfare - \$1500, rental car (including fuel) -\$45/day x 5 days = \$225, hotel - 5 nights x \$80/night = \$400, per diem - 5 days x \$35/day = \$175 Total per trip cost - \$2,300

Resources

es Cost Element		Skill	Department	Curve	Ouantity Units
Ĺ	750 STRAIGHT TIME BASE	M020 MANAGERS (GRADE 69 - 72)	K265S ER Programs	Linear	1.898.00 Hours
-	Factors 1 Technical Support Mgr	1898 Hrs per vear			
Ĺ	750 STRAIGHT TIME BASE	M030 MANAGEMENT INTEGRATORS (GR	K265S ER Programs	Linear	1.898.00 Hours
r	Factors 1 Field Operations Mar	1898 Hrs per vear			
L	A5M TRAVEL/TRAIN/RELOCAT	0000 NONE	K265S ER Programs	Bell Shaped	4.600.00 Dollars
	Factors 2 Trips	2300 Dollars/trip			

Line Item 040 - ER Baseline Updates

BOE

2 Environmental Engineers will be required for ER baseline update of outyear projects. Estimated hours are calculated as follows: 10 hours per week per

1 Project Control Support person will be required for ER baseline update of outyear projects. Estimated hours are calculated as follows: 10 hours per week.

Resource

ces	Cost Element			Skill				Department			Curve	Ouantity	Units
L	750	STRAIGH	T TIME BASE	E050	ENVIRON	IMENTAL ENGINEERS	R100S	RMRS	Salaried		Max Backload	60.00	Hours
_	Factors	2	Envrionmental Engineers		10	hours per week		3	weeks				

WBS No: 1GAA0101 Rockv Flats Closure Project Project Baseline Devl
Activity ID: 1GXXX1006 Baseline Cost and Basis of Estimate USS Filter 1GAA

Factors 1 Project Control Support 10 hours per week 3 weeks

Line Item 050 - ER Hydrogeology Issue Management

750 STRAIGHT TIME BASE

ER Hydrogeology issue management will require an Environmental Scientist (S020) an estimated 24 hours per week and an Environmental Engineer (E050) an estimated 16 hours per week.

Estimated hours are calculated as follows: 24 hours per week x 52 weeks = 1248 hours 16 hours per week x 52 weeks = 832 hours

Resources

BOE

Units Cost Element Skill Quantity Department Curve 750 STRAIGHT TIME BASE E050 ENVIRONMENTAL ENGINEERS R100S RMRS Salaried Linear 832.00 Hours Factors 16 Hours per week 52 weeks S020 ENVIRONMENTAL SCIENTISTS K265S ER Programs A5H SUBCONTRACTED SRVS Linear 112.207.70 Dollars

Factors 24 Hours per week 52 weeks 89.91 per hour

Line Item SYS - Contingency And Escalation

BOE

Cost Element Skill Units Resources Curve **Ouantity** Department CON CONTINGENCY 0000 NONE ZDEPT No Department 502.742.80 Dollars Linear Factors 502743 Dollars ESC ESCALATION 0000 NONE ZDEPT No Department 179.841.70 Dollars Linear

Factors 179842 Dollars

Report Totals:

Labor Hours Labor Cost Materials/Sub Contingency Total Prime Burden Cost Total Cost Total & Escalation Total Cost Cost 2.423.162 2.237.688 6.412.134 959.924 7.372.058 56.857 1.751.285

Page 17 of 17 6/23/00 8:58:08 AM *OFFICIAL USE ONLY*